

**UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE
STUDY PLAN**

Study ID code	CAPMC-T-0423-RA	
Title	Evaluation of mycorrhiza on grass performance	
National Project No.	Rangeland 1.1	
Study Type	AE	
Study status	Active	
Location	CAPMC	
Study Leader	David Dyer, CAPMC	
Duration	2002 - 2008	
Cooperators	CelPrel	
Land Use	Rangeland, wildland	
Vegetative Practices	Primary	550 Range planting
	Secondary	342 Critical area planting
Resource concerns	<u>Resource</u>	<u>Consideration/Problem</u>
	Soil	Restoration, soil erosion
	Animals	Grazing land conservation
Long Range Plan	Study falls under Section IV, Part 1 and 4 of the CA PM LRP	
Description	Determine if mycorrhiza on seed improves plant performance	
Status of Knowledge	Past greenhouse research at the PMC on mycorrhiza has shown that it does improve plant performance. There is a need to document performance in field conditions.	
Experimental Design	Randomized Complete Block Design, three replacations	
Treatment 1	Title: Raw seed Description: No coating	
Treatment 2	Title: Mycorrhiza Description: seed coated with mycorrhiza	
Treatment 3	Title: Slow release N Description: Slow release N added to coating	

Treatment 4	Title: N and mycorrhiza Description: Slow release N and mycorrhiza added to coating
Materials and Methods	RCB, three replications using two species, purple needlegrass and Berber orchardgrass. Planting broadcast in 20X20' plots with 50 PLS per sq. foot. Perform weed control as needed.
Final Evaluations	Field plantings
Technology Transfer Products	Revise FOTG standards, TechNote
Literature Cited	
Keywords	Restoration, rangeland, native grass, mycorrhiza, seed coating
Review by:	CA. State Plant Materials Committee
Approvals:	As per approval of CAPMC Business Plan